

For receiv	ing Office use only
ternational Application No.	
ternational Filing Date	
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•	International Application N	lo.		
		· .		
REQUEST	International Filing Date			
The undersigned requests that the present	<u>'</u>			
international application be processed according to the Patent Cooperation Treaty.		and "PCT International Application"		
according to the second	Applicant's or agent's file reference 167-A-PCT/JPW/JML (if desired) (12 characters maximum)			
Box No. 1 TITLE OF INVENTION		:		
CD39/ECTOADPASE AS A TREATMENT FOR THRO	MBOTIC AND ISCHEM	IC DISORDERS		
Box No. II APPLICANT	•			
Name and address: (Family name followed by given name; for a designation. The address must include postal code and name of coaddress indicated in second so the applicant's State (that is, counting the second below)	n legal entity, full official nuntry. The country of the ry) of residence if no State	This person is also inventor.		
of residence is indicated below,		Telephone No. None		
THE TRUSTEES OF COLUMBIA UNIVERSITY IN	THE CITE	Facsimile No.		
OF NEW YORK West 116th Street and Broadway		None .		
New York, New York 10036		Teleprinter No.		
United States of America		None		
	State (that is, country) of	residence:		
State (that is, country) of nationality: United States of America	United States	of America		
for the purposes of:  States  A the United	States of America of	America only the States indicated in the Supplemental Box		
Par No. III FURTHER APPLICANT(S) AND/OR (FUR	THER) INVENTOR(S)			
box 100. 11.	a legal entity, full official	This person is:		
Name and address: (Family name followed by given name; for designation. The address must include postal code and name of coaddress indicated in this Box is the applicant's State (that is, count address indicated in this Box is the applicant's State (that is, count address indicated below.)	of residence if no State			
of residence is indicated below.)		applicant only		
PINSKY, David J.		X applicant and inventor		
23 Kennedy Road				
Cresskill, New Jersey 07626		inventor only (If this check-box is marked, do not fill in helow.)		
United States of America				
and of nationality	State that is, commy of	f residence:		
State (that is, country) of nationality: United States of America	United Sta	ites of America		
This person is applicant all designated all designated	ated States except d States of America	he United States indicated in the States indicated in the Supplemental Box		
for the purposes of:  States the United International States States the United International States International States International International States International				
Box No. IV AGENT OR COMMON REPRESENTATION	/F: OR ADDRESS FOR	CORRESPONDENCE		
The person identified below is hereby has been appointed to act of the applicant(s) before the competent International Authorities		·		
Name and address: (Family name followed by given name:	I code and name of country.	(212) 278-0400		
WHITE, John P.		Facsimile No.		
Cooper & Dunham LLP		(212) 391-0526		
1185 Avenue of the Americas		Teleprinter No.		
New York, New York 10036		None		
United States of America		resentative is has been appointed and the		
Address for correspondence: Mark this check-box whe space above is used instead to indicate a special address to	o which correspondence sh	ould be sent.		
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Box	No.	V DESIGNATION OF STATES			in the last because food one must be marked):			
The	folic	owing designations are hereby made under Rule 4.9(a) (magnetic field)	ark I	he app	licable check-boxes; at least one must be markey.			
	ΑP	ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozanisique, 35 State, 35 State, 35 State, 35 State, 35 State, 36 State, 37						
		A Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakistan, MB Reproduct instances and Eurasian Patent RURussian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent						
	EP	European Patent: AT Austria, BE Belgium, CH and LI Switzerland and Electricisteris, CT Cypius, BE Selgium, CH and LI Switzerland and Electricisteris, CT Cypius, BE Selgium, CH and LI Switzerland and Electricisteris, CT Cypius, BE Selgium, CH and LI Switzerland and Electricisteris, CT Cypius, BE Selgium, CH and LI Switzerland and Electricisteris, CT Cypius, BE Selgium, CH and LI Switzerland and Electricisteris, CT Cypius, BE Selgium, CH and LI Switzerland and Electricisteris, CT Cypius, BE Selgium, CH and LI Switzerland and Electricisteris, CT Cypius, BE Selgium, CH and LI Switzerland and Electricisteris, CT Cypius, BE Selgium, CH and LI Switzerland and Electricisteris, CT Cypius, BE Selgium, CH and LI Switzerland and Electricisteris, CT Cypius, BE Selgium, CH and LI Switzerland and Electricisteris, CT Cypius, BE Selgium, CH and LI Switzerland and Electricisteris, CT Cypius, BE Selgium, CH and LI Switzerland and Electricisteris, CT Cypius, BE Selgium, CH and Electricisteris, CT Cypius, CT Cy						
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	••	Patent (if other kind of protection or treatment desired, spec	ify o	n dotte	ed line):			
L/S	tions	United Arab Emirates		LC	Saint Lucia			
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K	AG	Antigua and Barbuda Albania	=		Liberia			
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[2]			図	MD	Republic of Moldova			
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X		India		JUZ	Viet Nam			
1 –	IS	Iceland	_	] VN	Viet Nam			
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IX	KE	Kenya		ZA	South Africa			
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	KP	Democratic People's Republic of Korea	C	heck-	box reserved for designating States which have become			
1 K	, .u	Republic of Korea	·P	arty to	the PC1 after issuance of this sheet.			
"			atic	ns ma	ide above, the applicant also makes under Rule 4.9(b) all other			
	Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded the imprisons which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded the imprison which would be permitted under the PCT except any designation (s) indicated in the Supplemental Box as being excluded the imprison which would be permitted under the PCT except any designation (s) indicated in the Supplemental Box as being excluded the imprison which would be permitted under the PCT except any designation (s) indicated in the Supplemental Box as being excluded the imprison of the supplemental Box as being excluded the imprison of the supplemental Box as being excluded the imprison of the supplemental Box as being excluded the imprison of the supplemental Box as being excluded the imprison of the supplemental Box as being excluded the imprison of the supplemental Box as being excluded the imprison of the supplemental Box as being excluded the imprison of the supplemental Box as being excluded the imprison of the supplemental Box as being excluded the imprison of the supplemental Box as being excluded the supplemental Box as being excluded the supplemental Box as a suppl							

designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation (including fees) must reach the receiving Office within the 15-month time limit.)

DRIORITY C	SIM	9 🔲 Further prio	nit ins me indicated	in the Supplemental Box.		
BUX 1101	Number Where earlier application is:					
Filing date of earlier application (day/month/year)	of earlier application			international application: receiving Office		
item(1) (13.08.99) 13 August 1999	09/374,586	US				
item (2)						
·						
item (3)						
of the earlier application(	The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of the present international application is the receiving Office) identified above as item(s):  * Where the earlier application is an ARIPO application, it is mandatory to indicate in the Supplemental Box at least one country party to the Paris  * Where the earlier application is an ARIPO application, it is mandatory to indicate in the Supplemental Box at least one country party to the Paris					
Where the earlier application is Convention for the Protection of In	an ARIPO application, it is t idustrial Property for which t	nandatory to indicate in the Si that earlier application was file	upplemental Box at least of ed (Rule 4.10(b)(ii)). See S	Supplemental Box.		
DO2 1.0.	NAL SEARCHING AU	and the same wasteller of on	elier search: reference	e to that search (if an earlier		
Choice of International Search if two or more International Sec competent to carry out the interna- the Authority chosen; the two-letter	orching Authorities are se	equest to use results of en arch has been carried out by o ate (day/month year)	r requested from the Interne Number	ational Searching Authority):  Country (or regional Office)		
ISA / us						
Box No. VIII CHECK LIST	; LANGUAGE OF FIL	onal application is accompa	nied by the item(s) mar	ked below:		
This international application of the following number of sheet	ontains This internations:		med by the nemes, man			
request : 4	2. separate	e signed power of attorney				
description (excluding sequence listing part) : 70		general power of attorney;		iny:		
Ciamino	5 4. Li stateme	ent explaining lack of signal document(s) identified in l	Box No. VI as item(s):			
abstract : 1		ion of international applica				
drawings : 3.	6. Li translat	e indications concerning de	posited microorganism	or other biological material		
of description	sequence listing part of description  7. separate indications concerning deposited uncroorganism or other biological material  8. Nucleotide and or amino acid sequence listing in computer readable form  Statement of Compliance in Accordance with \$1.821(f),  Other ispective Attachment A Transmittal Letter					
Total number of sheets : 12			Transmitta	1 Letter		
Figure of the drawings which should accompany the abstract		Language of filing of the nternational application:	English			
TO A CENT						
Box No. IX SIGNATURE OF APPLICANT OR AGENT.  Next to each signature, indicate the name of the person signing and the capacity in which the person signs of each signature, indicate the name of the person signing and the capacity in which the person signs of each signature, indicate the name of the person signing and the capacity in which the person signs of each signature.						
THE TRUSTEES	OF COLUMBIA UN	IVERSITY IN THE (	CITY OF NEW YOR	RK .		
Bish H Israel Sept 14,2000						
Date						
NAME: Beth H. Israel  TITLE: Executive Director, Projects & Grants						
		receiving Office use only		2. Drawings:		
Date of actual receipt of the international application:	·			received:		
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:						
4. Date of timely receipt of the corrections under PCT Arti			nttal of search copy del			
5. International Searching Aut (if two or more are competed	thority ISA /	6. Transm	arch fee is paid.			
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Sheet No. ..3....

		S	heet No 3A			
Box No. VI PRIORITY C			Further price	ori indicated	I in the Supplemental Box.	
		Number .		Where earlier applica		
Filing date of earlier application (day/month/year)	of ear	ier application	national application: country	regional application:* regional Office	international application: receiving Office	
item (1) (13.08.99)	09/	374,586	us			
13 August 1999			<u> </u>			
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The receiving Office is recoff the earlier application in purposes of the present in	ternationa	il application is u	ne receiving Office, identifi		1 one country party to the Paris	
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BUX :		ARCHING AUT	at the season was also of on	rlier sourch: referenc	e to that search (if an earlier	
Choice of International Searce (if two or more international Seconpetent to carry out the international the Authority chosen; the two-letter	ational sea	thorities are sea	rch has been carried out by o	r requested from the Intern Number	auonal Scarching Authority):  Country (or regional Office)	
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Box No. VIII CHECK LIST		This internation	al application is accompa	nied by the item(s) mai	rked below:	
This international application of the following number of sheet	is: 4	1. 🛛 Jee calcu	lation-sheet	•		
request	•		signed power of attorney		anv	
sequence listing part)	description (excluding sequence listing part) : 70  3. copy of general power of attorney, reference number, if any: 4. statement explaining lack of signature					
claims :	5	4. Statemen	locument(s) identified in	Box No. VI as item(s):		
abstract	1	5. D priority o	on of international applica	ition into (language):		
	15	6. Chansian	indications concerning de	sposited microorganism	or other biological material	
of description :	sequence listing part of description  5    Note   Number of sheets   120					
Total number of sheets: 12 Figure of the drawings which		L	anguage of filing of the	English	al neces	
should accompany the abstract	·		ternational application:			
Box No. IX SIGNATURE  Next to each signature, indicate the ne	OF APP	LICANT OR AC	SENT	ions in such empletivis not o	hyuns tirm reading the requestl.	
	6	J. Pinsky		,	1/00	
	<u> </u>		receiving Office use only	•	2. Drawings:	
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Corrected date of actual rec timely received papers or d the purported international	application	on:			not.received	
4. Date of timely receipt of the corrections under PCT Art			- 1 / <del></del>	and of american arms da		
5. International Searching Au (if two or more are competent)	thority IS		until se	nttal of search copy del earch fee is paid.		
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See Notes to the request form



Supplemental Box If the Supplemental Box is not used, this sheet should not be in ... dea in the request.

1. If, in any of the Boxes, the space is insufficient to furnish all the information: in such case, write "Continuation of Box No. ..." [indicate the number of the Box] and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient, in particular:

- (i) if more than two persons are involved as applicants and/or inventors and no "continuation sheet" is available: in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below:
- (ii) if, in Box No. II or in any of the sub-boxes of Box No. III, the indication "the States indicated in the Supplemental Box" is checked: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is applicant;
- if, in Box No. II or in any of the sub-boxes of Box No. III, the inventor or the inventor/applicant is not inventor for the purposes of all designated States or for the purposes of the United States of America: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is inventor;
- (iv) if, in addition to the agent(s) indicated in Box No. 11', there are further agents: in such case, write "Continuation of Box No. 11" and indicate for each further agent the same type of information as required in Box No. 11:
- (v) if, in Box No. 1', the name of any State (or OAPI) is accompanied by the indication "patent of addition," or "certificate of addition," or if, in Box No. 1', the name of the United States of America is accompanied by an indication "continuation" or "continuation or if, in Box No. 1', the name of each State involved (or OAPI), and after the name of in-part": in such case, write "Continuation of Box No. 1" and the name of each State involved (or OAPI), and after the name of each such State (or OAPI), the number of the parent title or parent application and the date of grant of the parent title or filing of the parent application;
- (vi) if, in Box No. 17, there are more than three earlier applications whose priority is claimed: in such case, write "Continuation of Box No. 17" and indicate for each additional earlier application the same type of information as required in Box No. 17;
- (vii) if, in Box No. 17, the earlier application is an ARIPO application: in such case, write "Continuation of Box No. 17", specify the number of the item corresponding to that earlier application and indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed.
- 2. If, with regard to the precautionary designation statement contained in Box No. 1, the applicant wishes to exclude any State(s) from the scope of that statement: in such case, write "Designation(s) excluded from precautionary designation statement" and indicate the name or two-letter code of each State so excluded.
- 3. If the applicant claims, in respect of any designated Office, the benefits of provisions of the national law concerning non-prejudicial disclosures or exceptions to lack of novelty: in such case, write "Statement concerning non-prejudicial disclosures or exceptions to lack of novelty" and furnish that statement below.

Continuation of Box No. V.: Continuation-in-part of U.S. Serial No. 09/374,586, filed August 13, 1999.